OFFSHORE WIND, RECREATIONAL AND COMMERCIAL FISHERMAN MITIGATION MEASURES DEVELOPMENT

OCEAN CITY WORKSHOP REPORT

To: Brian Hooker, BOEM

From: Peggy Farrell, Ecology and Environment

Date: January 11, 2013 (2:00 P.M. - 6:00 P.M.)

Location: Ocean Pines Library

11107 Cathell Road Ocean Pines, MD

RE: Development of Mitigation Measures to

Reduce Conflicts between Wind Industries and Fishermen – Ocean City Maryland Stakeholder Workshop



ATTENDEES

Name	Agency
Ward Slacum	Versar
Jeff Eustler	Commercial Fishing Industry
Alison Bates	University of Delaware
Ron Smith	MD Saltwater Sportsman's Association
Buddy Seigel	Recreational Fishing Industry
Richard Nieman	Recreational Fishing Industry
Mark Monaco	National Oceanographic and Atmospheric Administration
Walt Boge	Ocean Pines Anglers Club
John Martin	Martin Fish Company
Roman Jesien	Coastal Fisheries Advisory Committee, MD Coastal Bays Program
Arlo Hemphill	MD Coastal Bays Program
James Armstrong	Mid Atlantic Fisheries Management Council
Andrew Minkiewicz	Kelley Drye, LLP
Steve Doctor	MD Department of Natural Resources
Brad Stevens	Not specified
Charles Choate	Recreational Fishing Industry
Gwynne Schultz	MD Department of Natural Resources
Rhonda Jackson	Fishermen's Energy
Andrew Gohn	MD Energy
Finn McCabe	Recreational Fishing Industry
Jeremy Firestone	University of Delaware
Michael Luisi	MD Department of Natural Resources
Monty Hawkins	Recreational Fishing Industry, Headboat Captain
Catherine McCall	MD DNR

Brian Hooker	Bureau of Ocean Energy Management
Sean Meegan	Ecology and Environment, Inc.
William Daughdrill	Ecology and Environment, Inc.
Sarah Bowman	Ecology and Environment, Inc.
Jennifer Harris	Ecology and Environment, Inc.
Pat Field	Consensus Building Institute

OVERVIEW

The Bureau of Ocean Energy Management (BOEM) is developing best management practices (BMPs) and mitigation measures for reducing use conflicts within portions of the U.S. Atlantic Outer Continental Shelf (OCS) that may be used by the wind energy industry and fishermen. The purpose of the regional stakeholder workshops is to engage fishermen and wind energy developers (plus interested agency representatives) in dialogue that would result in development of BMPs and mitigation measures that would be beneficial to both parties and relevant for inclusion in BOEM NEPA analyses. The outreach workshops do not discuss any specific wind energy development projects, but rather describe general types of practices or studies that could be implemented as mitigation for wind energy development. As projects are proposed, there will also be opportunities for site-specific mitigation measures. This document constitutes the Outreach Report from the Ocean City, Maryland stakeholder workshop.



MEETING SUMMARY



Located on the Atlantic coast of Maryland, Ocean City is a major port of call for a large diversity of fisheries and is in proximity to the Maryland offshore Wind Energy Area (WEA). The workshop was scheduled in the winter, to encourage attendance by fishermen during non-peak fishing periods in Maryland. The Ocean Pines Library was suggested as an appropriate meeting location through stakeholder consultations.

Workshop attendees were greeted upon arrival and asked to sign in. Participants were directed to

tables and/or visual displays placed around the room. The meeting started at 2:15 pm when Pat Field, the meeting facilitator, welcomed everybody to the meeting and asked each participant to introduce themselves and state the industry or agency they represent. He then briefly discussed the format for the meeting so that attendees had an understanding of the agenda and meeting rules. This was followed by an introduction of Brian Hooker, BOEM Biologist, who opened the meeting with a PowerPoint presentation that included:

- Different stages of offshore wind facility development.
- Purpose of the workshops.
- Regional Vessel Trip Report and Vessel Monitoring System data.
- Known fishing and wind energy questions and concerns.
- Current Best Management Practices required by BOEM.
- A description of BOEM's Environmental Studies Program.
- Various opportunities for input.



The majority of the meeting was spent in discussion during two breakout sessions. Breakout Session #1 began directly after the presentation. Each table represented a breakout group. Groups worked on identifying issues of concern from their perspective, utilizing the list of issues identified from the previous workshops as a guideline. A 15-minute break was held at 4:00 pm.

Breakout Session #2 followed the break and focused on formulating mitigation measures that could be employed during offshore wind energy development to reduce impacts. Utilizing the handout as a guide, each group identified potential management strategies that would address some of their concerns. At 5:15 pm Mr. Field asked each table facilitator to identify the key points that were discussed in each group and after the final report out, requested feedback and comments from the participants on the workshop format and content (listed further below). The meeting adjourned at 5:45 pm.

IDENTIFICATION OF CONCERNS

Table 1 lists issues and concerns regarding offshore wind development identified at the Ocean City Workshop.

Table 1: Ocean City, Maryland Workshop Issues and Concerns

Exclusion Zones and Access

- Maryland has a limited amount of direct oceanfront coastline concerned about competing uses for slips and dock space during construction and maintenance operations.
- Will fishing be allowed inside the wind farm? There is a lot of uncertainty about the effects of offshore wind on the fishing industry.
- How long does the construction process take?
- What is known about the effects of off-shore turbines on tourism such as charter boat captains and recreational fishing?
- Wind farms could cause boats leaving from Ocean City in the White Marlin Open to be delayed if they have to travel longer distances or around certain areas.
- Concerned about the impacts of the arrays on competing fisheries and the health of these fisheries. Species include flounder, rockfish, tuna, mahi mahi, swordfish, clams, and scallops.
- Fishermen are concerned about the feasibility of operating a scallop boat within an offshore wind farm. Turbines will be a boon for lobster and sea bass fishermen and a problem for draggers.

Once the turbines are in the water would the major avigation channel off Ocean City to be modified to accommodate the extra construction vessel traffic; if so, ships currently using this channel could be forced to use other routes. How would this impact the areas currently used by the fishing community? What would happen as boat traffic is increased in other areas (e.g., what if there were 50 barges/day in an area where before there were none)? How long is the construction and cable burial period when there would be no access for fishing? How close will fishermen actually be able to get to the wind farm? The Coast Guard should state exactly what will be allowed. Who has authority to limit access to the area? The USCG can limit access if there is a security or safety issue. The developer can only request that their private property be left alone. If a cable becomes unburied, this could close off a large area to fishing. **How does the height of turbines impact air navigation? What are FAA restrictions or requirements? How will security be handled? What are the protocols for search and rescue operations? Federal agencies need to be the ones telling the developers what to do. How is BOEM considering studies from Europe? Are these studies only highlighting the positive impacts of development? Does the U.S. Army Corps of Engineers have regulations for checking on buried cables? **Communication** There is a problem with how the fishing community is currently being asked to participate in the offshore energy discussion, which is frustrating. How is the diving community responding to wind turbines? **Do wind turbines affect VHF radio transmission?** Where do transmission lines come on shore? Wind energy areas offshore should be identified through marine spatial planning as suitable for energy use. There are concerns that offshore wind areas are being designated outside of the marine spatial planning process. Where will the turbines connect onshore? Right now there are no good proposals for this. There		
 * There is a problem with how the fishing community is currently being asked to participate in the offshore energy discussion, which is frustrating. * How is the diving community responding to wind turbines? * Do wind turbines affect VHF radio transmission? * Where do transmission lines come on shore? * Wind energy areas offshore should be identified through marine spatial planning as suitable for energy use. There are concerns that offshore wind areas are being designated outside of the marine spatial planning process. * Where will the turbines connect onshore? Right now there are no good proposals for this. There is no space for an onshore staging area in an already crowded shoreline primarily used for recreation and tourism. Costs for dock space will increase as a result. How is BOEM going to address this? Will the offshore wind industry displace other industries in the area? * Want to know more about failure rates, kinds of failures, and what are the procedures should a failure occur. * What are the noise levels during both construction and during normal operation? * What is the Doppler affect, if any, of the moving turbine blades? * There are numerous submerged, disposed and unexploded ordnance that must be handled with care and caution. * Will the array cause silting over time? * Visibility is a concern. Lighting at night needs to be bright enough. Daytime fog is a problem. The backwash on newer radars is a problem and you have to turn the sensitivity down. The same reflective tape used on highways would work well. * What about ice throw from the blades? * How will fishermen get updated charts that show bottom structures and the location of cables on a regular basis? 	Regulations	City to be modified to accommodate the extra construction vessel traffic? If so, ships currently using this channel could be forced to use other routes. How would this impact the areas currently used by the fishing community? What would happen as boat traffic is increased in other areas (e.g. what if there were 50 barges/day in an area where before there were none)? How long is the construction and cable burial period when there would be no access for fishing? How close will fishermen actually be able to get to the wind farm? The Coast Guard should state exactly what will be allowed. Who has authority to limit access to the area? The USCG can limit access if there is a security or safety issue. The developer can only request that their private property be left alone. If a cable becomes unburied, this could close off a large area to fishing. How does the height of turbines impact air navigation? What are FAA restrictions or requirements? How will security be handled? What are the protocols for search and rescue operations? Federal agencies need to be the ones telling the developers what to do. How is BOEM considering studies from Europe? Are these studies only highlighting the positive impacts of development? Does the U.S. Army Corps of Engineers have regulations for checking on buried
participate in the offshore energy discussion, which is frustrating. How is the diving community responding to wind turbines? Do wind turbines affect VHF radio transmission? Where do transmission lines come on shore? Whid energy areas offshore should be identified through marine spatial planning as suitable for energy use. There are concerns that offshore wind areas are being designated outside of the marine spatial planning process. Where will the turbines connect onshore? Right now there are no good proposals for this. There is no space for an onshore staging area in an already crowded shoreline primarily used for recreation and tourism. Costs for dock space will increase as a result. How is BOEM going to address this? Will the offshore wind industry displace other industries in the area? Want to know more about failure rates, kinds of failures, and what are the procedures should a failure occur. What are the noise levels during both construction and during normal operation? What is the Doppler affect, if any, of the moving turbine blades? There are numerous submerged, disposed and unexploded ordnance that must be handled with care and caution. Will the array cause silting over time? Visibility is a concern. Lighting at night needs to be bright enough. Daytime fog is a problem. The backwash on newer radars is a problem and you have to turn the sensitivity down. The same reflective tape used on highways would work well. What about ice throw from the blades? How will fishermen get updated charts that show bottom structures and the location of cables on a regular basis?		cables?
 Where will the turbines connect onshore? Right now there are no good proposals for this. There is no space for an onshore staging area in an already crowded shoreline primarily used for recreation and tourism. Costs for dock space will increase as a result. How is BOEM going to address this? Will the offshore wind industry displace other industries in the area? Want to know more about failure rates, kinds of failures, and what are the procedures should a failure occur. What are the noise levels during both construction and during normal operation? What is the Doppler affect, if any, of the moving turbine blades? There are numerous submerged, disposed and unexploded ordnance that must be handled with care and caution. Will the array cause silting over time? Visibility is a concern. Lighting at night needs to be bright enough. Daytime fog is a problem. The backwash on newer radars is a problem and you have to turn the sensitivity down. The same reflective tape used on highways would work well. What about ice throw from the blades? How will fishermen get updated charts that show bottom structures and the location of cables on a regular basis? 		 participate in the offshore energy discussion, which is frustrating. How is the diving community responding to wind turbines? Do wind turbines affect VHF radio transmission? Where do transmission lines come on shore? Wind energy areas offshore should be identified through marine spatial planning as suitable for energy use. There are concerns that offshore wind areas are being
procedures should a failure occur. • What are the noise levels during both construction and during normal operation? • What is the Doppler affect, if any, of the moving turbine blades? • There are numerous submerged, disposed and unexploded ordnance that must be handled with care and caution. • Will the array cause silting over time? • Visibility is a concern. Lighting at night needs to be bright enough. Daytime fog is a problem. The backwash on newer radars is a problem and you have to turn the sensitivity down. The same reflective tape used on highways would work well. • What about ice throw from the blades? • How will fishermen get updated charts that show bottom structures and the location of cables on a regular basis?		for this. There is no space for an onshore staging area in an already crowded shoreline primarily used for recreation and tourism. Costs for dock space will increase as a result. How is BOEM going to address this? Will the offshore wind
• What are the effects of EMF on marine mammals?	Safety	 procedures should a failure occur. What are the noise levels during both construction and during normal operation? What is the Doppler affect, if any, of the moving turbine blades? There are numerous submerged, disposed and unexploded ordnance that must be handled with care and caution. Will the array cause silting over time? Visibility is a concern. Lighting at night needs to be bright enough. Daytime fog is a problem. The backwash on newer radars is a problem and you have to turn the sensitivity down. The same reflective tape used on highways would work well. What about ice throw from the blades? How will fishermen get updated charts that show bottom structures and the
	EMF	

Marine Wildlife	 Is there an opportunity for artificial reef creation? If some areas will be off-limits to fishing activities, fishing pirates will still take advantage. Enforcement will be needed. Dredging has an impact on fisheries because of turbidity. Dredging should not occur at a time when fishing resources are elevated. What are the cumulative impacts of offshore wind? Birds and bats typically migrate at night. What will happen to the migratory shorebirds (knots, Carolina wrens, etc.) if turbines are constructed offshore? Significant communities will have developed on the turbines after 30 years and removing the turbines will impact them. Can Ocean City approach BOEM and say they don't want the turbines removed? Is temperature an issue with the cables? Will this help or hurt animals in the area? Will the underwater seascape change when the wind farms are operational? How will the wind farms affect sand movement? Some species will be sensitive to changes. There are limited studies on the effects of wind development on fish. Will the foundations attract or deter fisheries. The distribution of different species might change.
Liability	 There is concern about the government allowing access to these areas and insurance companies prohibiting fishermen to access the same areas. Trawlers will have gear issues. Construction industries tend to toss things overboard and these items get caught in trawling gear. How liable will developers be after decommissioning if not all equipment and parts are removed? Depth of cables and the potential for gear snag is a concern.

BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES

Table 2 contains potential BMPs suggested at the workshop in Ocean City.

Table 2: Ocean City, Maryland Workshop Best Management Practices and Mitigation Measures

Project Design, Navigation, and Access		
Studies and Analysis	 Developer should be required to conduct a study that involves reaching out to, and creating a map of, the different stakeholders and uses in the proposed wind farm area. The Coastal Atlas is imperfect but has useful data. Artificial reefs should be discussed in any development plan. The plan should discuss what is possible (or not) and the effects that arrays may have on fish density, recruitment, nurseries, etc. BOEM should do a better job of letting people know what peer-reviewed information is available. Use the turbines to collect offshore data such as water quality, flood surge data, etc. BOEM can promote the uses of the turbines to collect scientific data. 	
Siting	 Areas designated as Marine Protected Areas should also be designated for offshore wind development. In other words, develop wind in areas that are already closed. Site turbines close to hard bottom communities. Fishermen need 1,200 feet buffer from existing corals to lay a trap. If you are not near coral then there is no fish. BOEM should space everything (turbines, marine mammal zones, etc.) at a minimum of 1,200 feet from corals. This way fishermen can still fish and the turbines won't affect their activities. Orientation and configuration of the arrays are important, i.e., longer lanes, and 	

	along bottom contours. BOEM should require proof that developers met with
	fishermen, discussed fishing areas and micro-siting of turbines, and took their needs into account.
Navigational Safety	 BOEM should require developers to post information on the turbines telling fishermen which frequency they should tune into for information on the wind farm. There should be a recording with information that comes from the wind farm that you can only hear when you are nearby. BOEM should post information on SIRIUS radio, integrated with GIS software, for navigation. Signage on turbines should explain what type of foundation it is and if there is rock scour underneath. There should be a VHF and/or cell phone repeater station located within the wind farm to enhance safety.
Cabling	 A cable monitoring program should be required. Monitoring could be required once a year, every year, for the first 5 years. Then, once it is shown how sediment moves and if the bottom is stable, monitoring could occur once every 5 years or after a storm event. Bury cables a minimum of 2 meters, or 6.5 feet. If the industry has the ability to go deeper, they should (e.g., Fishermen's Energy) depending on cost effectiveness. This would show good faith by the wind energy industry.
9	Safety, Liability, and Insurance during Operations
Gear	 Developers should consider an exclusion zone for commercial fishing efforts, but not recreational ones. Insurance underwriters should meet with developers and fishermen to discuss fishing around turbines before they are built. Turbine insurers should also insure fishermen against liability. There should be no liability for fishermen if gear gets snagged on equipment.
	Fishermen will cooperate more if they know they won't be charged for damage from snagged gear.
	Natural Resources
Impacts to Fisheries	Fishermen may want developers to leave the monopole foundations in place after decommissioning. BOEM may want to consider this option during scoping.
	Stakeholder Engagement
Communication	Utilize local and actively-read publications such as the Coastal Fishermen magazine Tidelines.
	 Developers should work with fishermen to choose the optimal times of year to communicate with fishermen in a particular area. For the area surrounding Ocean City, the best time to reach out to fishermen is April to June and September to October. Seasonal fishermen are gone in the winter months and are busy fishing in the summer months. Developers should identify all of the local fishing and marine habitat organizations and chapters such as the Ocean Pines Anglers, the Assateague Coastal Trust, the DNR Coastal Fisheries Advisory Committee, and the MD Saltwater Sportfishing Association (MSSA). There are 16 chapters of the MSSA; the Ocean City chapter is key to engagement because these members are the primary users of the ocean (most others focus on the Bay). BOEM should target local fishing newspapers, fish houses, and sport fishing marinas in MD. Each coastal community has their own fishing magazine and BOEM should post information in these. BOEM should post information on savingseafood.org because the commercial fisherman post information there.

- Use Facebook, Twitter, and texts to send information to fishermen.
- Communication in general should be frequent and developers should stay in constant contact.
- Use the VMS system to communicate directly with fishermen. Communicate "bursts
 of information" similar to a Notice-to-Mariners, something you would want the fleet
 to know about.
- A dedicated VHF channel should be used and this way the USCG could announce any emergencies.
- An email listserv is the best way to get information out. Anyone should be able to sign up. Put an ad in a magazine or newspaper telling fishermen to sign up for the listserv. Require fishermen to sign up for the listserv when they get their license.
- Do not use regular postal mail to send out notices.
- Have a designated webpage to announce closings and planned maintenance. Use maps and coordinates.
- Designate a fishing representative that travels to the meetings and sees the presentations from the developers, and have that person report back to their constituents who will then spread the word.
- There should be one designated person within BOEM for fishermen to call to report gear snags on equipment and other problems. BOEM would know the coordinates of what is there and who owns the equipment. There needs to be a central location for communication going both ways.

SUGGESTIONS FOR FUTURE WORKSHOPS

Suggestions from previous workshops were taken into account for the Ocean City meeting. Each table facilitator clearly explained the purpose of each breakout session so that the distinction between the two sessions was clear. Facilitators continued to devote special attention in leading the groups during the second breakout session in trying to formulate usable, concrete mitigation measures. Table facilitators also focused on leading the dialogue and speaking less themselves, in order to get better conversation amongst table members.

Participants at previous workshops requested to see information that is more local and applicable to their immediate area. Therefore, updated and more local information was included in the BOEM

PowerPoint presentation. For example, Vessel Monitoring System data, current through 2010, was presented for the immediate areas offshore Ocean City, Delaware, and southern New Jersey.

Several participants inquired where they can obtain more information online. The BOEM website was given to participants, and Mr. Hooker distributed his business cards for those who would like to submit comments or to ask questions. Additionally, email invitations to the remaining meetings will contain a link to the website.

